Operating Manual

Electronic QML/QPL Query Tools

Revision 8 (26 Oct 96)

Written by:

Ned Raybould and David Queenan

Query Tool System developed by:

Ned Raybould, (614) 692-0582, edward_raybould@dscc.dla.mil
Rick Barker, (614) 692-0596, richard_barker@dscc.dla.mil
Chris Miller, (614) 692-0583, christopher_miller@dscc.dla.mil
David Queenan, (614) 692-0525, david_queenan@dscc.dla.mil
Dan Wonnell, (614) 692-0523, daniel_wonnell@dscc.dla.mil
Michael Grammens, (614) 692-0604, michael_grammens@dscc.dla.mil

Table of Contents

DISCLAIMER 4

INTRODUCTION 5

DOWNLOADING INSTRUCTIONS 7
- Instructions for Downloading the Query Tools from the DSCC World Wide Web (WWW) server 7

QML/QPL Query Tool files on the World Wide Web server 9

INSTALLATION 10

OPERATION 11
- General Instructions for using a FoxPro-based application 11
- Objects 11
  - Input Fields 11
  - Radio Buttons 11
  - Check Boxes 11
  - Pop-ups 11
  - Push Buttons 12
- Methods of navigation on a screen 12
- Main Screen 13
  - QML Query Tool & Search Tool 13
  - Manufacturer's Flow Information 13
  - Important Information regarding the QML (or QPL) 14
  - Re-Index Tables 14
  - Return to Operating System 15
- QML (or QPL) Query Tool & Search Tool 15
  - Enter the Part Number 15
  - Type of PN 15
  - Specific Manufacturers 16
  - Search by Key Words 16
  - Sort Order 17
  - Matching 17
  - Report Output 17
    - Screen 17
    - Printer 18
    - Browse 18
    - Database file 18
    - Text File 18
    - Text File, Comma Delimited 18

Table of Contents

Include RAD Hard PNs (Query Tool for MIL-PRF-38535 only) 19
Show Plastics Only 19
Printer Set-Up 19
Printer Driver 19
Port 19
Change Printer Driver Setup 19
Push Buttons 20
Manufacturer's Flow Information 21

APPENDIX A 22
Main Menu 22
Vendor Part Number Search 22
Standard Part Number search 23
Standard Microcircuit Drawing Part Numbers: 24
Military Specification Part Numbers: 24
EIC/Description search 25
National Stock 26
Generic Wild Card Search 26
SMD Projects 27
Features available from the standard browse window 27
Print Options 28
MPCASS Options 29
Registered User Options 29
Parts control for microcircuits: 30
Configuration Management of SMDs: 30
Distribution of SMDs: 31

DISCLAIMER

Within this Operating Manual several manufacturer's names or their products/listing may have been used incidentally. Listing of a manufacturer within this Operating Manual is not intended to and does not connote endorsement of the manufacturer by the Department of Defense.

INTRODUCTION

DSCC-VQ has developed Query Tool applications to provide an enhancement to the functionality of the hard copy versions of the Qualified Manufacturer's Lists (QMLs) for MIL-PRF-38534 and MIL-PRF-38535, and the Qualified Products List (QPL) for MIL-PRF-19500. These Query Tools were developed using FoxPro version 2.5 for MS-DOS. The query tools, however, have been compiled as stand-alone executable files and do not require a copy of FoxPro. Minimum system requirements are an IBM compatible computer with at least a 80386SX microprocessor and 4 MB of RAM. The query tools are MS-DOS applications, but can be executed through Windows 3.1 or Windows 95 with some experimentation. If it is determined that the Query Tools will not execute through Windows, it is preferable to exit Windows entirely and run the program from DOS. If the Query Tools will execute through Windows an icon can be downloaded. This icon is packaged as a self-extracting archive which must first be expanded in order to use.

The Query Tools will not replace the hard-copy version of the QMLs or QPLs for the foreseeable future. Customers who utilize the QML or QPL in its paper version are encouraged to download the Query Tools, and attempt to run them on their computer. It is entirely possible to produce the equivalent of a paper copy using the Query Tools, but many users (depending on their requirements) may not need to print out the entire QML. The Query Tools can also be installed on most file-serving local area networks. Assuming that file permissions and attributes are properly set up in the directories where the Query Tools reside, the files are completely shareable by the entire work group.

The files for the query tools are arranged in sets and are available from the DSCC World Wide Web server. Within each set are several files that make up the Query Tool. These file sets were originally created with modularity in mind in order to keep download times to a minimum. Each set contains one file that represents the entire tool, another file represents a fresh data package, another file represents a fresh interface system, and finally one file represents the Query Tool application compiled for running through FoxPro on another platform (such as Unix or the Macintosh). See Table I for file names and brief descriptions.

When downloading these file sets, it is important to keep in mind that each set must be kept separate. As an example, file sets from the Query Tool for MIL-PRF-38535 must be kept in a separate directory from the file sets for the MIL-PRF-38534 Query Tool. This is necessary because each file in the file set is a compressed archive file and contains files that may be in common (at least in filename) between the query tools.

The general instructions for installing the query tools, regardless of the download method, are to download the file that is needed, and place it in a pre-determined directory of your choice, and then run it to expand the archive. If you are setting up an update and you run the self-extracting archive file you will be prompted that certain files already exist. It is necessary to respond in such a way as to overwrite the old files. Once a particular Query Tool has been set up, it is necessary to run the main executable file to start the application (see Table I).

For non-DOS users: The file QML.APP (or HQMLAPP.APP, 19500.APP, TOOLAPP.APP) and its associated database, index, and memo files are available for download in the same manner as above. It is provided as a compressed .ZIP file for those who cannot run a DOS executable file. The file is named QMLNODOS.ZIP (or HQMLNODS.ZIP or QPLNODOS.ZIP, or TOOLNODS.ZIP), and when "un-zipped" will yield the APP file and the database files that make up the Query Tool. The compressed file can be un-zipped with the popular "PKUNZIP" utility (*must be of the proper version for your operating system*). For DOS users (and perhaps other users; although it has not been confirmed) the command is (as an example):

```
pkunzip qmlnodos
```

All Query Tool files were originally compressed with the PKZIP 2.04g utility. The application should run on any machine that has a copy of FoxPro designed for that machine.

DOWNLOADING INSTRUCTIONS

Instructions for Downloading the Query Tools from the DSCC World Wide Web (WWW) server

The same general instructions for setting up the Query Tools as outlined in the Introduction apply when downloading files from the WWW server. The files, of course, must first be downloaded to your computer. Most of the instructions for downloading from the WWW server are actually located on the WWW pages that you will encounter when connecting to the server. In addition, a hypertext version of this manual is accessible from each Query Tool web page which can be accessed at one of the Uniform Resource Locators (URL) indicated below. Your computer must have a Web browser (graphical or text-based) installed or you must have access to a Web browser. Please consult with your system administrator or Internet service provider (ISP) for the specifics on your particular Web browser. Particularly, if you access the Internet through a commercial service provider, you may have to download the Query Tool files to your computer after first downloading them to your ISP account.

The following, case-sensitive URL will allow the user to access the Sourcing and Qualification Unit's (DSCC-VQ) web page.

http://www.desc.dla.mil/V/VQ/index.html

From that page the Query Tool pages can be selected by following the appropriate links:

For the Query Tool for MIL-PRF-38534:

Hybrid Microcircuits Team , then
Available Downloads, then
Query Tool for MIL-PRF-38534

For the Query Tool for MIL-PRF-38535:

Monolithic Microcircuit Team , then
Available Downloads, then
Query Tool for MIL-PRF-38535

For the Query Tool for MIL-PRF-19500:

Electronic Devices Team , then
MIL-PRF-19500, then
Available Downloads, then
Query Tool for MIL-PRF-19500

For the Standard Microcircuit Query Tool:

Monolithic Microcircuit Team , or **Hybrid Microcircuits Team** , then
Available Downloads, then
Standard Microcircuit Query Tool

The Web page provides an intuitive interface whether you are using a text-based browser or a graphical browser. Files

are downloading simply by clicking on the filename within graphical browsers and by hitting the "Enter" or "Return" key within text-based browsers. Web browser clients may need to be configured initially to receive the downloaded files. Instructions are provided on the main home page. Your system administrator or ISP should also be able to help with browser configuration. You may wish to instruct your system administrator or ISP that file transfer is accomplished via the Hypertext Transfer Protocol (HTTP) and not via the File Transfer Protocol (FTP).

QML/QPL Query Tool files on the World Wide Web server

Filename	Description	Approximate download times from BBS at 33,600 bits per second (minutes) *
QML-38534	(/incoming/tools/qml/38534/ on FTP server) Main executable: **HQML.EXE**	
HQMLEXE.EXE	.EXE application file and associated databases	5.0
HQTOOLUP.EXE	.EXE application file only	4.2
HQMLDATA.EXE	databases only	0.8
HQMLNODS.ZIP	.APP application file and associated database files for non-DOS computers	1.2
QML-38535	(/incoming/tools/qml/38535/ on FTP server) Main executable: **QML.EXE**	
QMLEXE.EXE	.EXE application file and associated databases	5.6
QTOOLUPD.EXE	.EXE application file only	4.2
QMLDATA.EXE	databases only	1.4
QMLNODOS.ZIP	.APP application file and associated database files for non-DOS computers	1.9
QPL-19500	(/incoming/tools/qpl/19500/ on FTP server) Main executable: **QPL19500.EXE**	
QPLEXE.EXE	.EXE application file and associated databases	4.7
PTOOLUPD.EXE	.EXE application file only	4.1
QPLDATA.EXE	databases only	0.5
QPLNODOS.ZIP	.APP application file and associated database files for non-DOS computers	0.9
STANDARD MICROCIRCUIT QUERY TOOL	(/incoming/tools/qml/combo/ on FTP server) Main executable: **TOOL.EXE**	
TOOLEXE.EXE	.EXE application file and associated databases	8.2
TOOLUPDT.EXE	.EXE application file only	4.2
TOOLDATA.EXE	databases only	4.1
TOOLNODS.ZIP	.APP application file and associated database files for non-DOS computers	4.5

* maximum theoretical download time. Assumes no other traffic on the network and all connections are at least 33.6 kbps.

Table 1

INSTALLATION

The installation and preparation for use of the QML Query and Search Tool is different depending on whether the user is internal to DSCC or external.

When the Query Tools were first made public they were placed on the DESC-EL Electronic Bulletin Board system. It was decided that the program needed to be provided in a modular fashion due to the relatively long download times. This trend was continued when the Query Tools were placed on the DESC FTP server and the DSCC-V World Wide Web (WWW) server. Please refer to Table I in order to see this modularity.

Currently four different Query Tools are available. Each Query Tool must reside in sub-directory separate from the others. A first-time installation requires the user to download the file indicated on Table I as ".EXE application file and associated databases". This file must be placed in its own sub-directory and then executed in the same manner as any other DOS .EXE file. The file will expand to many files, and the file indicated as the "main executable" will be executed to start the Query Tool. When it is time to update the application on the user's computer, a different file or files will be downloaded, depending upon what needs updated. If the user is aware that a change has been made to the application itself, he will download the file indicated as ".EXE application only." However, if only a new set of databases (with new part numbers or flow information) is needed then the file indicated as "databases only" needs to be downloaded. After the file or files are downloaded, they must be placed in the corresponding sub-directory, and executed in order to expand the file into its databases or application files. The user may receive a prompt on the screen asking for permission to overwrite any existing files. The user must respond in the affirmative in order for the new changes to take effect. If the user needs both a new application and a new set of databases then the main file ".EXE application file and associated databases" should be downloaded. It is of significance to note that a new set of data is made available every Friday (barring any unforeseen circumstances) on the WWW server. A new application file is made available whenever any change, whether minor or major, is made to the FoxPro code of the Query Tool. World Wide Web users will have an indication of when the latest changes were made by reading the page.

Some people may receive the Query Tools on a 3 1/2" diskette. These disks contain their own installation program and the user simply needs to follow the instructions on the diskette label. Under normal circumstances, diskettes will only be mailed out on a quarterly basis to those who are on the distribution list for the paper copy of the QML. Users who have a strong desire to continue to receive the paper copy may do so, however, the powerful features of the Query Tools, timeliness, and availability of the Query Tools from the WWW should not be overlooked when considering the alternatives.

At the present time, the Query Tools are only available as MS-DOS applications designed to be run on an IBM compatible computer.

OPERATION

General Instructions for using a FoxPro-based application

When the Query Tool application is executed at the MS-DOS level, a copy of FoxPro also begins executing. This copy of FoxPro is a part of the compiled .EXE file and cannot be removed in order to run the FoxPro database application on a stand-alone basis. This copy of FoxPro however will produce many "objects" in the Query Tool application that users of a DOS version of FoxPro will be familiar with. The next few subsequent sections will explain these "objects" for those who are unfamiliar with FoxPro.

Objects

Input Fields

Input fields are empty areas of the screen, typically with a different background color, where text entry is made. In most, if not all cases, the input fields will have a text prompt above or to the left of them. These fields are used to enter characters or numbers. **Example: Enter the part number _____**

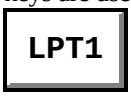
Radio Buttons

Radio buttons resemble the preselect buttons on older car stereos. Only one option on a radio button group can be selected at any one time. Selecting a particular option will deselect any other option previously selected. Radio buttons consist of a pair of parentheses to the left of each choice. The selected choice will have a dot inside the pair of parentheses. Selection is accomplished by clicking the left mouse button on the option or TABbing to the appropriate option and hitting the "Enter" key. The TAB key is then used to leave the radio buttons and move to the next object. **Example: ( ) Military**
(þ) Generic

Check Boxes

Check Boxes are similar to radio buttons, however, the user is not limited to selecting one item. Any or all check boxes in a given group can be selected. Check boxes are identified by a pair of brackets and any given check box is selected by clicking the left button of the mouse. De-selecting a check box is accomplished by clicking the left button of the mouse again. The "Enter" key may also be used to toggle the check box setting. The "TAB" key is used to move to the next object. An "X" inside the pair or brackets indicates that the particular option has been selected. If a check box prompt is followed by a set of ellipses (...), this indicates that selecting this option will bring forward a dialog box where further input will be asked for. **Example: [ ] Specific Manufacturers...**

Pop-ups

A Popup consists of a box with a text prompt inside. The mouse is used to select a particular item for a list of items in that prompt. A click-and-drag sequence is used with the left button of the mouse. The mouse is released when the appropriate choice has been made. Keyboard users will use the "TAB" key to arrive at the popup and then hit "Enter" to activate the popup. The arrow keys are used to make the appropriate choice and the "Enter" key is used to lock in the choice. **Example:** 

Push Buttons

Push buttons consist of angle brackets around a text prompt or action item. The action specified on the push button is carried out by clicking the left button of the mouse, tapping the "Enter" key (when the cursor is on the particular prompt), or by using the "hot-key" (if available). A "hot-key" will be specified directly on the button and will typically be a function key, or the "ESC" key. **Example: <ESC-Cancel>**

Methods of navigation on a screen

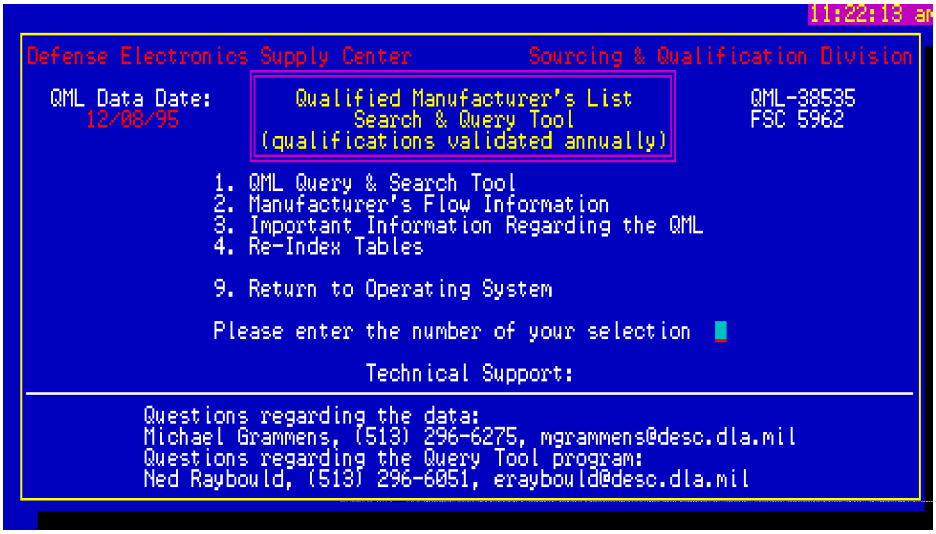
The mouse may be used at any time to navigate from one area of the screen to another. The "TAB" key will jump forward one object without affecting the current object. The "SHIFT+TAB" sequence will accomplish the same, but jump backwards one object. Tabbing forward past the last object will cycle back to the first object on the screen. Likewise, tabbing backwards past the first object will cycle to the last object of the screen.

Special screens that may appear are alert screens and dialog screens. Alert screens usually have a red background, and may require some sort of action. Alerts are usually meant to remind the user that some special action will occur, and that confirmation to proceed with the action is required. Dialog boxes usually have a purple background are designed to ask the user for more information before proceeding on. It is intended that when one of these special screens is present that the user not attempt to access another screen that may be buried. In most cases the user is prevented from accomplishing this action.

When making certain choices with the radio buttons, check boxes, popups, or push buttons, another prompt on the screen may no longer be applicable. This choice or prompt will then appear dim or may switch to a red color. This dim or red choice can no longer be made, until the action that de-activated the choice is undone.

Limited context-sensitive help is available by using the F1 key.

Main Screen



The main screen contains several items of significance. Along the top and the top-center of the screen appears a title and indications of the office that is responsible for the operation of and data contained in the Query Tool. The bottom of the screen contains technical support information and should be self-explanatory. The top-left of the screen indicates the current information date. The top-right of the screen indicates which QML and Federal Stock Class the particular Query Tool covers. Finally, the middle of the screen indicates several choices and contains a prompt for entry of the choice desired. The mouse is <u>not</u> used on this screen. Instead, the number of the choice is input is the box to the right of the "Please enter the number of your selection" prompt.

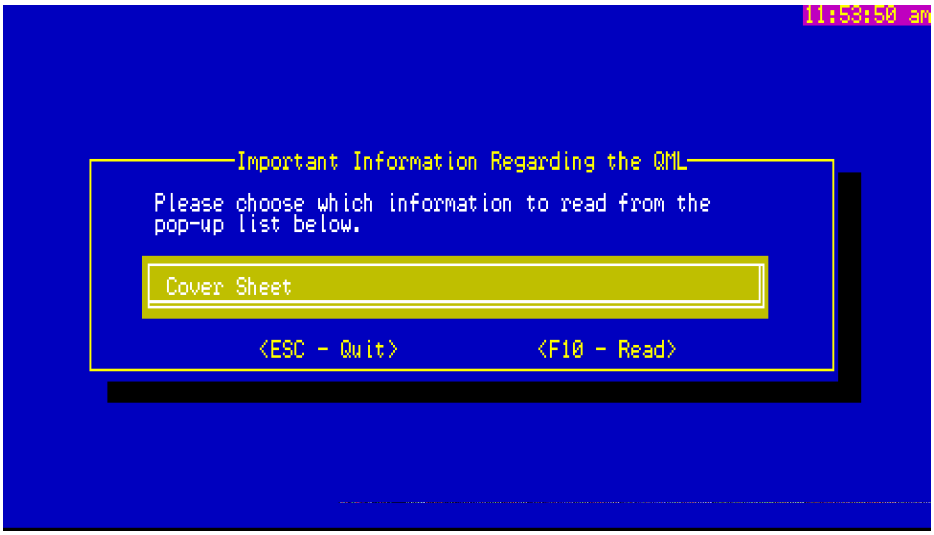
QML Query Tool & Search Tool

Selecting this option will bring forward the screen that allows for highly intricate part number searches. This screen will be explained in much further detail later.

Manufacturer's Flow Information

Selecting this option will bring forward the screen that can display flow information for one, several, or all manufacturer's that are listed on the QML. The information for a manufacturer that is displayed when using this screen is the same information that would appear on a paper copy of the QML. This screen will also be explained in much further detail later.

Important Information regarding the QML (or QPL)

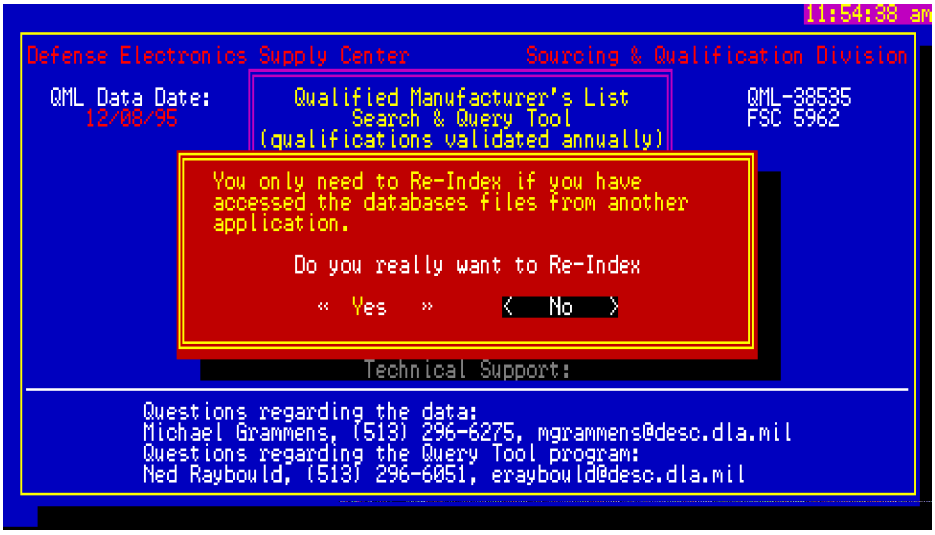


Selecting this option is designed to bring forward a screen from which cover page information and notes may be displayed. The screen that comes forward contains a pop-up to select the topic to be read. The user should select his topic and press the "F10" key to read the topic. The topic will then be displayed, and scroll bars will be supplied, if necessary, to view the entire contents of the topic. Push buttons will be provided to exit the viewing of the topic's contents, and an "ESC" key is provided to leave the screen that contains the list of topics to return to the main title screen.

Distributor's Information

Currently this option from the Query Tool main screen is only available on the Query Tool for MIL-PRF-38535. The user is able to view the distributor's information for one or more manufacturers at a time, or the user may view the entire list at once. Please consult the section on Manufacturer's Flow Information later in this document for detailed instructions on how to operate this screen, as it behaves the same as the Manufacturer's Information screen.

Re-Index Tables



This option is only necessary if the database index files have been modified by an external database application. Selecting this option will bring forward an alert to remind the user of this. It is important to note that the Query Tool is downloaded without index files (in order to

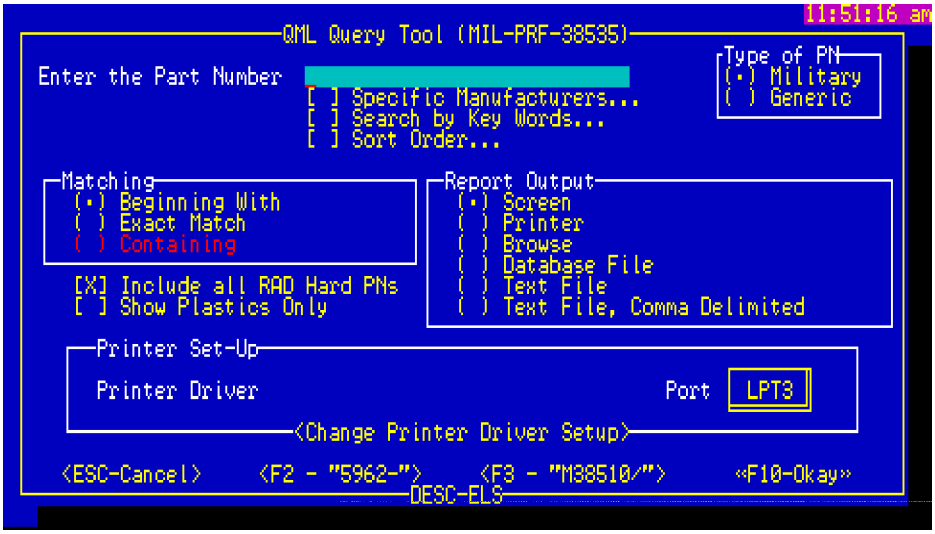
conserve space and download time). These index files will automatically be generated the first time, and any time that a data update is performed.

Return to Operating System

Selecting this option will exit the Query Tool system and return the user to whatever operating system was running prior to starting the Query Tool.

QML (or QPL) Query Tool & Search Tool

This option is selected by entering the number "1" at the main screen. The QML Query Tool screen is divided into several sections. Along the top border is the title of the screen along with the name of the specification that covers this QML (or QPL). To the right of the "Matching" box is a "Report Output" box.



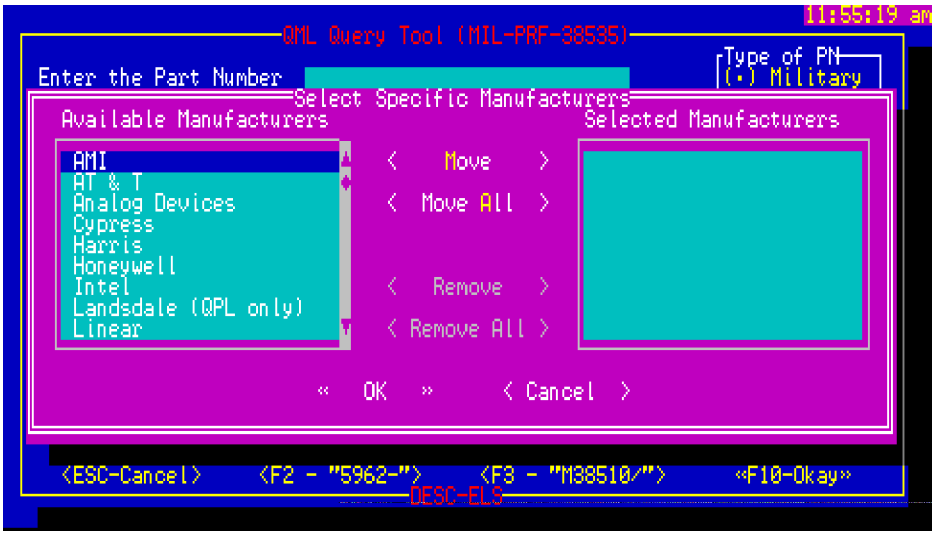
Enter the Part Number

Below the title is an input field for a part number. Either a military part number or a generic (manufacturer's) part number may be entered, and any portion or the entire part number may entered. The user should type only as much of the part number as is known. To widen the search, the user should enter less of the part number. Conversely, to narrow the search, the user should enter more of the part number.

Type of PN

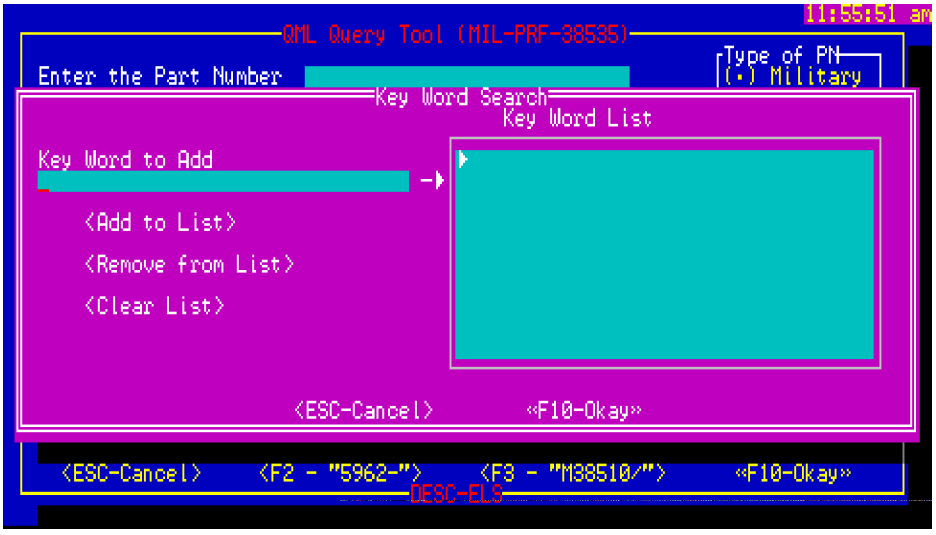
In the upper right corner of the screen is a pair of radio buttons in the "Type of PN" box to select whether the part number entered will be treated as a military part number or a generic part number.

Specific Manufacturers



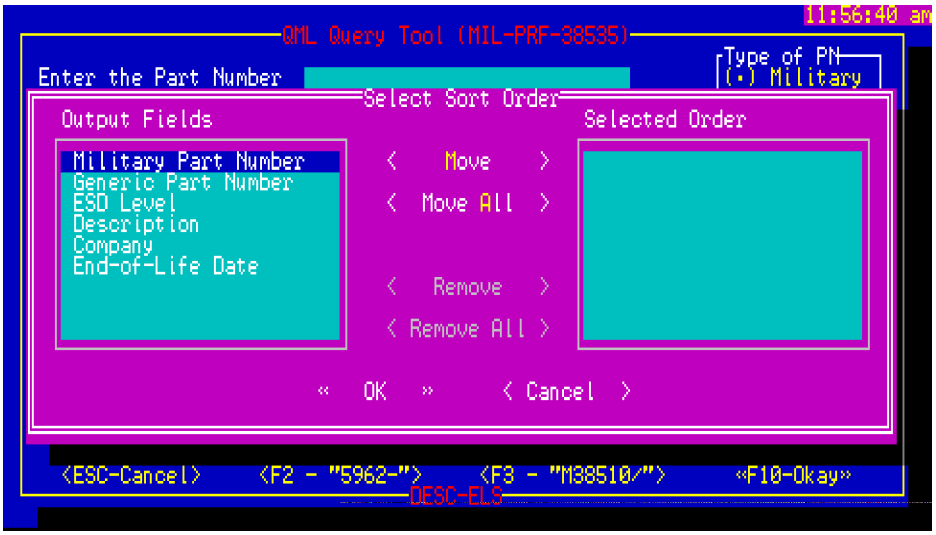
Selecting this check box will bring forward a dialog box that will allow the user to narrow the search of part numbers to those from specific manufacturers. The dialog box contains two lists. The left-hand list is the list of all manufacturers, and the right-hand list is the list of manufacturers that will be used in the query. The "Move" and "Move All" push buttons are for moving manufacturers from left to right, and the "Remove" and "Remove All" are for moving manufacturers from right to left. Individual manufacturers are moved or removed by highlighting the manufacturer's name and using the appropriate push button. Click the "OK" button when the lists are agreeable, or click the "Cancel" button if it is necessary to return to prior settings.

Search by Key Words



Selecting this check box will bring forward a dialog box that will allow the user to narrow the search of part numbers to those in which the part number description contains the key words that the users has selected in this dialog box. The "Key Word Search" dialog box contains several useful push buttons, a list, and an entry field. The user should type a key word in the entry box and click the "Add to List" push button to add the key word to the list. As many key words as necessary can be added to the list. To remove a key word from the list, the user must highlight the key word in the list by clicking with the mouse once, the click the "Remove from List" button. The "Clear List" button is self-explanatory. Press "F10-Okay" to accept the list as displayed. If more than one key word phrase is included in the list then a boolean "AND" is utilized between each key word phrase.

Sort Order



This check box may be selected to bring forward a dialog box that allows the user to change the order in which the part numbers are displayed from the default order. This dialog is very similar to the Specific Manufacturers dialog. The left-hand list contains descriptive names of all of the fields. The right-hand list contains the fields that play a part in the arrangement of the output of the query. The first field in the right-hand list is the primary sort field, the second field is the secondary sort field, and so on. As an example, suppose the right-hand list contains "Generic Part Number" and "ESD class", and they are listed in that order. Part numbers in the output will be sorted by generic part number, and if any generic part numbers are repeated, then those will be further arranged by ESD class.

Matching

Along the left-middle of the screen is a set of radio buttons in the "Matching" box that tell the application what portion of the part number you are entering. For a military part number entry, the "Containing" option here will be disabled. "Beginning With" implies that the part numbers that will be returned must begin with the portion of the part number entered in the "Enter the Part Number" field. "Exact Match" implies that part numbers will only be returned if a character-by-character match is made between the part numbers in the database and the part number entered in the "Enter the Part Number" field. The "Containing" button will only be available as an choice when generic part numbers are being searched. The part number that the user enters in the "Enter the Part Number" field may appear anywhere within the actual part number in the system to be returned.

Report Output

The "Report Output" section appears to the rights of the "Matching" group. Six different choices are available here and they are available regardless of other selections on the screen.

Screen

The "Screen" output is essentially a preview to what would be printed if the user selected the "Printer" option. The output is produced on the screen, however. The output also resembles what appears on the standard hard copy of the QML (or QPL). A scroll bar is available at the bottom of the screen in order to view tables columns that are off the screen to the right. Two push buttons exist at the bottom of the screen to either see more of the report or to return to the QML Query and Search Tool screen. Please note that if the "More" button is used, there is no capability to back-track. The query must be run again in order to see items that have already disappeared from the screen.

Printer

Selecting this option will produce a hard copy on either a hard-wired printer or a network printer. The user will need to use the items in the "Printer Set-Up" box that appears near the bottom of the screen. The printer set-up options will be explained a few sections later.

Browse

This option will tell the query tool application that the user wishes to view the output of his query in a standard database browse window. This browse behaves in the same manner as a FoxPro browse window would behave. Field columns can be transposed by dragging on the field title. Field widths can be altered by dragging on the line between field titles. Scroll bars appear along the side and along the bottom, and thumb tabs also appear on the scroll bars for faster navigation. The window can be made full-screen by clicking on the triple-line symbol in the upper-right corner of the browse window, or the size can be manually changed by dragging the dot in the lower-right corner of the browse window. Finally, the user can return to the QML Query and Search Tool screen by clicking on the square in the upper-left corner of the window.

Database file

Selecting this option will save the results of the part number query to a standard Xbase-compatible (dBase, FoxPro, Access, et. al.) database. A dialog box will appear asking for a file name, a drive letter, and a sub-directory off of a particular drive. Sub-directory navigation occurs as follows: to move towards the root, drag on the directory popup; to move away from the root, double-click on the directory name (directory names appear in brackets) that appears in the file list, where the parent directory is as shown in the directory pop-up. The filename is entered in an input field near the bottom of the dialog box, and the .DBF file extension will be supplied if missing. Standard MS-DOS filenames must be used.

Text File

Selecting this option will bring forward a dialog box to save an ASCII text version of the query results. This ASCII file will have the look of a hard copy printout but without the table border. In other words, the table will have the various columns to cover the part number, ESD level, generic part number, etc., but the columns will only be delineated by spaces. The use of this dialog box is the same as for the database file dialog box, however, if a file extension is not supplied, the .TXT extension will be provided.

Text File, Comma Delimited

This option will again bring forward a dialog box very similar to the two previously mentioned dialog boxes. Again, the .TXT file extension will be provided if necessary. The output will be ASCII text characters where each part number found from the search will be on a different line. The other fields (or information) about the part number will appear on the same line as the part number, but will be separated from each other by a comma. This information may then be imported into another application that reads comma-delimited text.

Include RAD Hard PNs (Query Tool for MIL-PRF-38535 only)

This option is on by default and ensures that RAD Hard parts will be included when the database is searched. The user can de-select this box if no RAD hard parts are needed in the resultant listing.

Show Plastics Only

This option is off by default. If left un-checked, all part numbers that meet the other specified criteria will be displayed. If checked, however, the query will be filtered further to include only plastic devices.

Printer Set-Up

The "Printer Set-Up" group appears near the bottom of the screen. Several items must be clarified in this area.

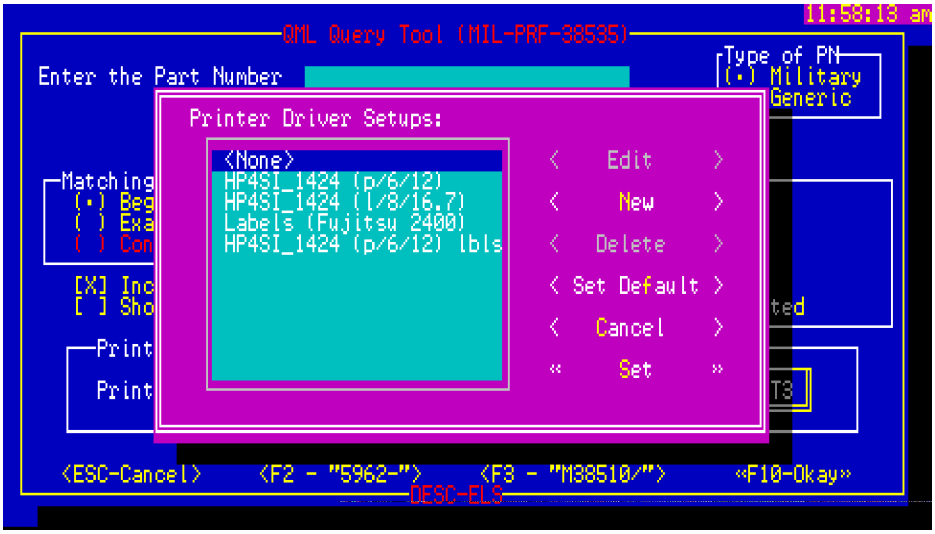
Printer Driver

To the right of this prompt appears the printer driver currently being utilized. Click on the "Change Printer Driver Setup" if the printer driver needed is not displayed here.

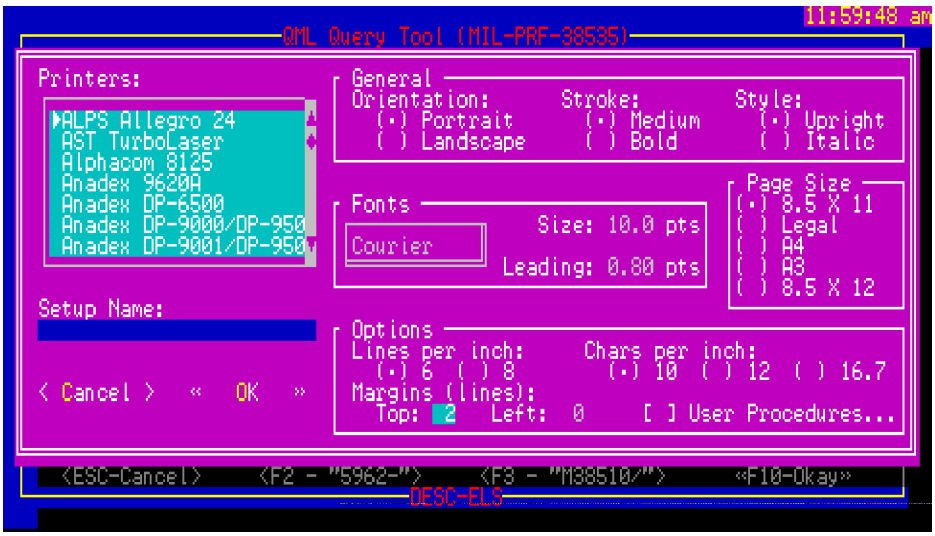
Port

Use this pop-up to change the output parallel port when sending the output of the query to a printer. LPT1 is normally a printer connected directly to the computer. Whereas, LPT2 or LPT3 are typically "ports" for use through a local area network (LAN).

Change Printer Driver Setup



Click this push button to bring forward a dialog to select a printer driver. This dialog contains a list of various printer driver setups or perhaps just the word "<none>". Highlight the appropriate driver, if it exists, and click the "Set" push button to activate that printer driver. If a printer driver setup is listed (the list contains only descriptions, not actual printer names), but it is unclear what the underlying printer driver is, then click on "Edit" to bring forward a dialog that will show the activated printer driver highlighted in its "Printers" list. Finally, if the "Printer Driver Setup" list does not contain the printer needed, then select "New" to start the printer selection dialog. This dialog is explained next.

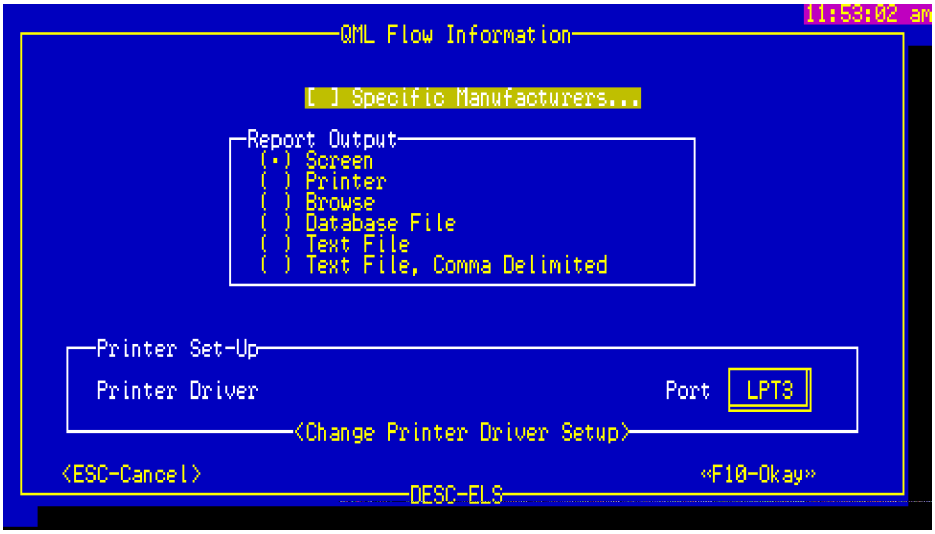


On the "New Printer" dialog scroll through the printer list to find the appropriate printer or a close substitute. Verify the orientation, stroke, and style under the "General" group. Verify the font under the "Fonts" group. Select the paper size under the "Page Size" group, and finally check the margins, lines per inch, and characters per inch under the "Options" group. Under "Setup name" type a descriptive name for the printer and click the "OK" push button. Then click on the "Set" push button in the "Printer Driver Setup" dialog.

Push Buttons

The QML Query and Search Tool screen has two, three, or four push buttons along the bottom of the screen. The "ESC" key will always be present to return the user to the main title screen. The user may click on the button or hit "ESC". All QML Query and Search Tool screens will have a "F10" key. This is the main processing button. The query system will take into account all selected criteria on the screen. It is not necessary to enter a part number in the "Enter the Part Number" field; the query system will simply use all other criteria (while reminding the user that a part number has not been entered). If a list of the entire database is needed, then the part number input field should remain blank and radio buttons and check boxes should be left at their default settings. Some QML Query and Search Tool screens may have other push buttons along the bottom to help ease the repetitive typing of certain part number prefixes. Pressing the function key that is designated will place the part number prefix in the "Enter the Part Number" field and place the cursor so that the remainder of the part number may be entered.

Manufacturer's Flow Information

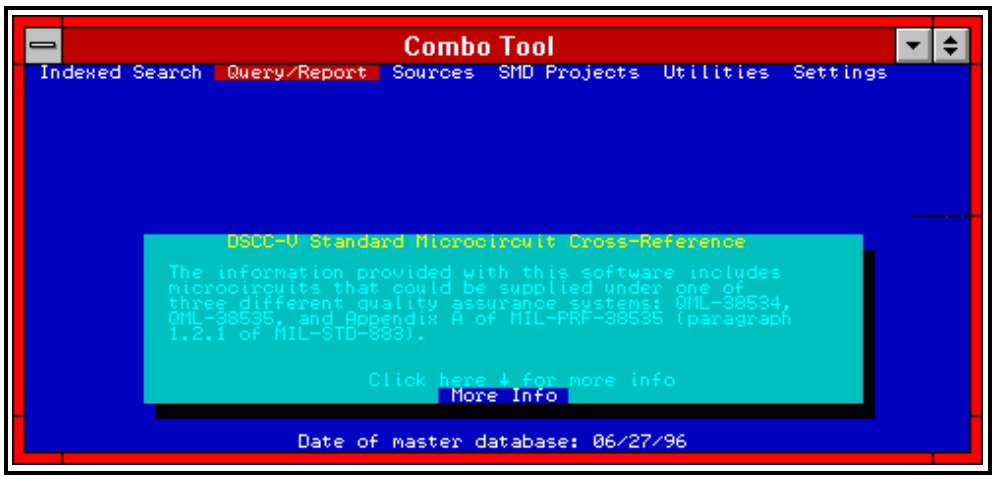


Most of the options on this screen behave exactly as they did on the QML Query and Search Tool screen. The "Specific Manufacturers" check box is used to narrow the search. All items in the "Printer Set-Up" section behave exactly as they did in the QML Query and Search Tool screen. The "ESC" key is used to return to the main title screen, and the "F10" key is used to start the processing. Under the "Report Output" section the "Screen", "Printer", and "Text File" are all variations on a theme of producing an output that resembles the manufacturer's flow information on the paper copy of the QML. The "Browse", "Database File", and "Text File, Comma Delimited" behave as they did under the QML Query and Search Tool screen, but the user is cautioned that there are several underlying databases that produce the output from this screen, and that these three options produce a "flat-file" representation of the data. A "flat-file" output contains all of the necessary data, but much data between part numbers (records) is repeated.

APPENDIX A

OPERATION OF THE STANDARD MICROCIRCUIT QUERY TOOL

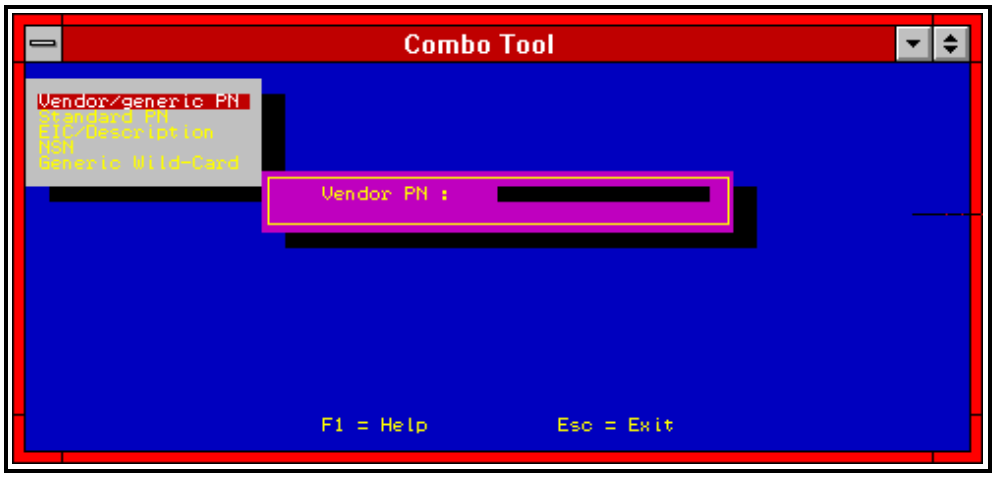
Main Menu



This program is a searching tool for cross-referencing microcircuits covered by Standard Microcircuit Drawings (SMDs) or Military Specifications. This program includes information found in QML-38535, QML-38534, MIL-BUL-103, and Specifications & Drawings in Progress, as well as additional information not found in any of these documents.

This program is intended for use by defense contractors, military system program offices, and other activities involved with parts control or logistics for microcircuits.

Vendor Part Number Search



This is a left-justified search. The results are as specific as the input search string. Wild cards (* and ?) are not supported.

This is a three-part search. First, all vendor part numbers in the master database (MDB.DBF) are searched. If a matching vendor PN is not found, then all generic part numbers are searched. If there is still no match, then all vendor part numbers in the secondary database (PN.DBF) are searched.

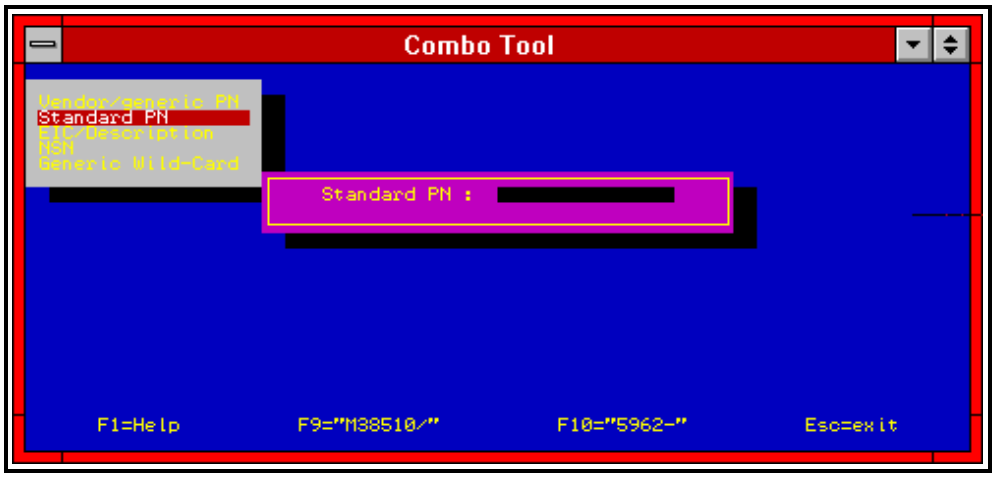
By changing the input string and using hotkeys, the effects of the search can be tailored.

Examples:

Enter "CY7C130-55DMB" to find one specific part number and its equivalent standard part number (5962-8687503XA). Then press F2 (Similar) to browse all parts listed under device 03 of 5962-86875.

Enter "CY7C" to browse all of Cypress' CY7C parts. From that list, highlight "CY7C130-55DMB" (standard PN 5962-8687503XA). Then press F2 to browse all parts listed under device 03 of 5962-86875.

Standard Part Number search

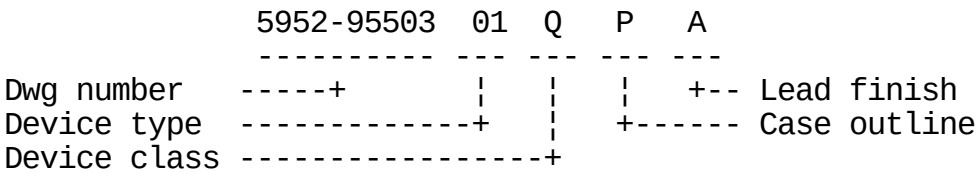


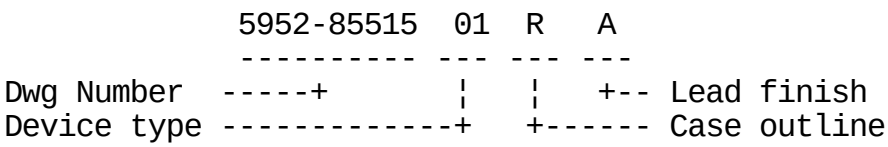
This is a left-justified search. The results are as specific as the input search string. Wild cards (* and ?) are not supported.

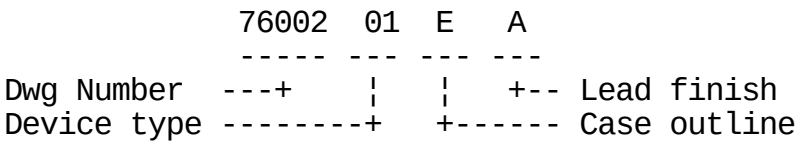
Examples:

INPUT STRING:	RESULTS:
5952-9550301QPA	all PNs for one device/pkg/lead combination
5952-9550301QP	all PNs for one device/pkg (all lead finishes)
5952-9550301	all PNs for one device type (all pkgs/leads)
5952-95503	all PNs for one drawing (all devices/pkgs/leads)
5952-95	all PNs for drawings done in 1995 (roughly)
5952-	all PNs starting with '5962-'

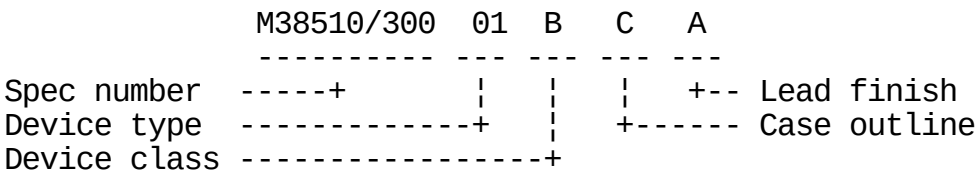
Standard Microcircuit Drawing Part Numbers:



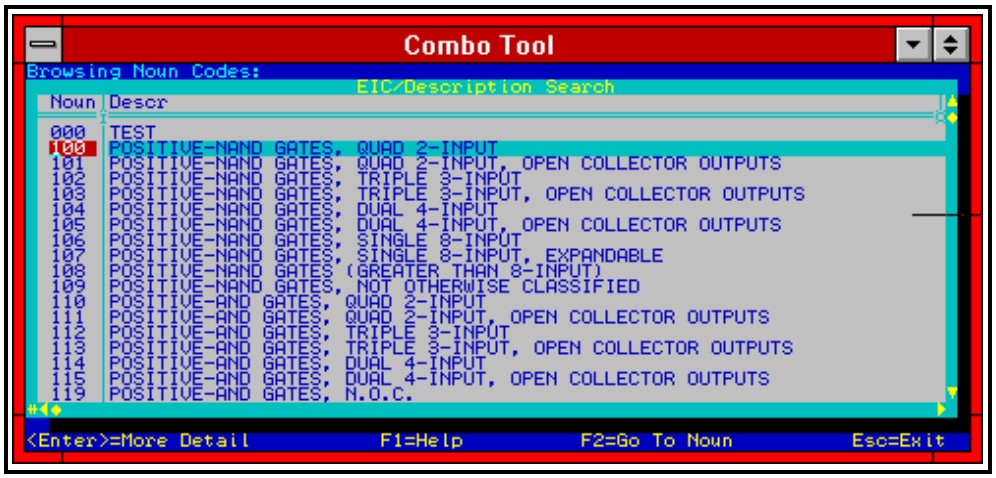




Military Specification Part Numbers:

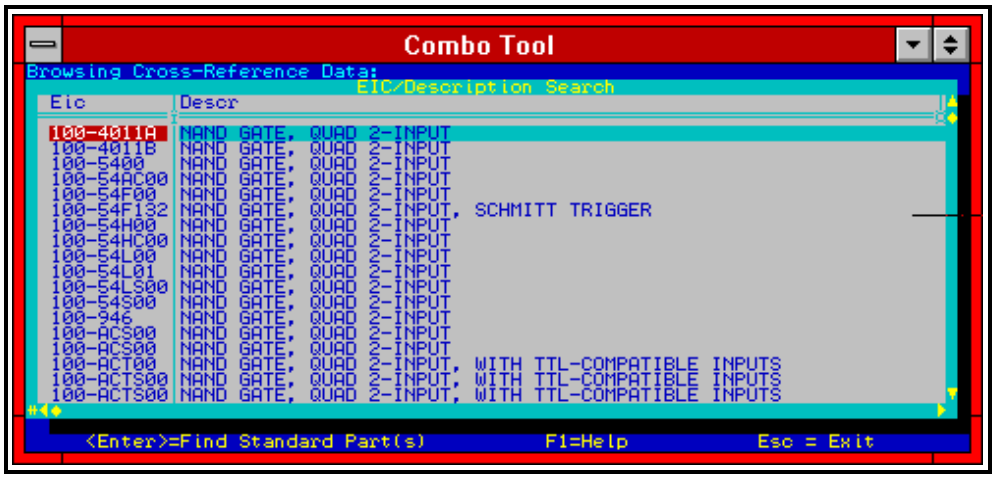


EIC/Description search



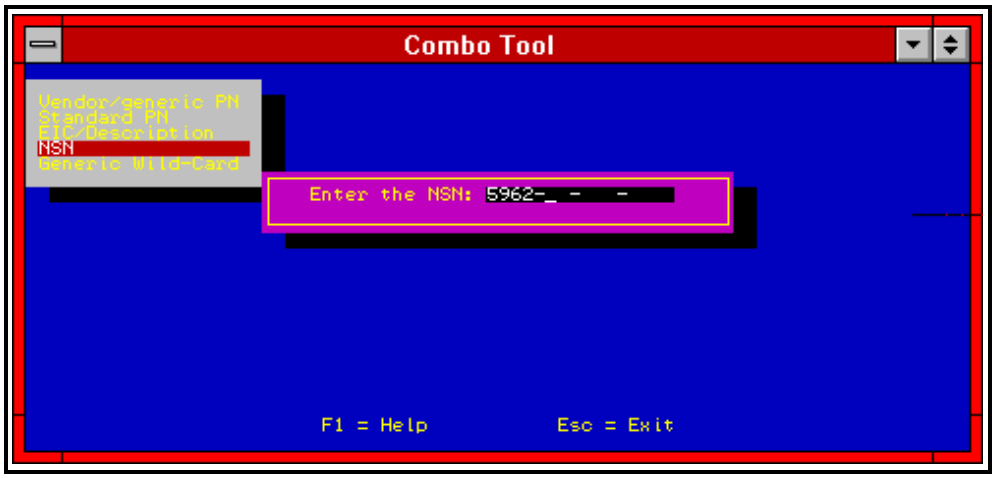
This is a browse-assisted search based on the Noun Codes from MIL-HDBK-103. The Noun Codes are displayed in a browse window with the general descriptions. Highlight a noun code and press <Enter> to find the Engineering Item Codes (EICs) that are based on the highlighted Noun Code.

If the search is successful, all the corresponding EICs are displayed in a browse window with more detailed description. Highlight an EIC then press <Enter> to search for a corresponding standard part number.



If a match is found, the results are displayed in the standard browse window.

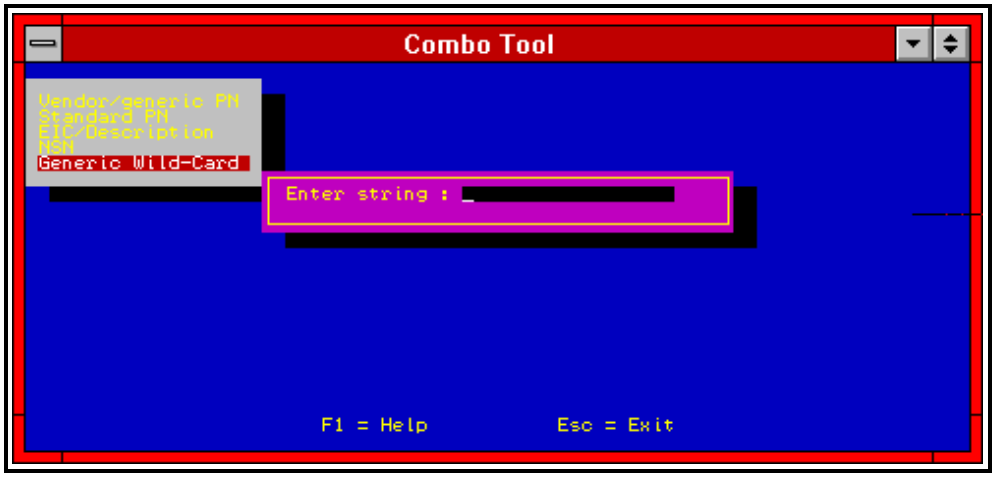
National Stock Number search



If the NSN is found, the corresponding standard part is displayed in the standard browse window.

The database comprises NSNs for microcircuits covered by standard microcircuit drawings or military specifications. This is not intended to be an exhaustive listing of national stock numbers for all microcircuits. The data is extracted from the Fed-Log CD-ROM and includes only NSNs for standard microcircuits that are correctly catalogued as controlling references.

Generic Wild Card Search

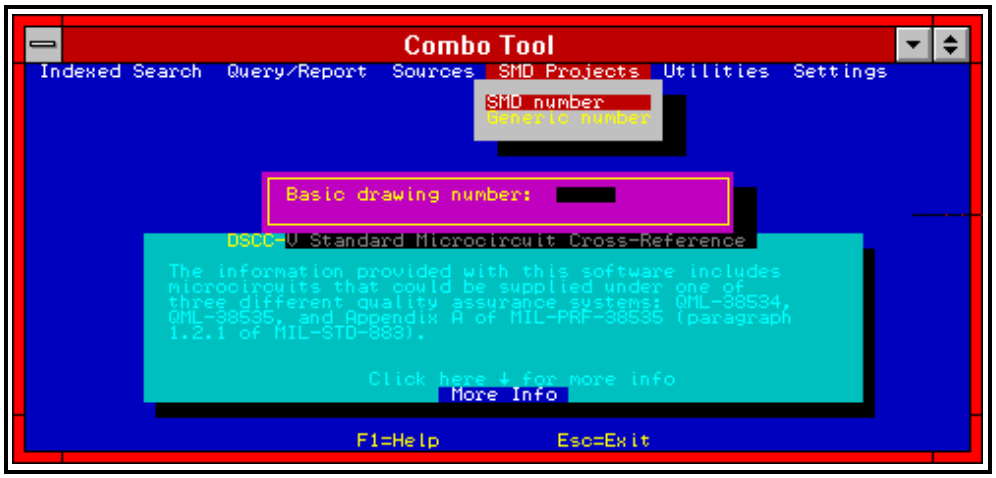


This is a wild card search that can be used if the normal Vendor PN Search fails to find a part number. Enter a part number with wild card characters and the program will will search three different databases for any records that have a match contained within the vendor PN or generic PN. The wild cards (* and ?) work the same as in DOS, except that each can be used more than once.

Example:

Input "*54??10*" to find 54HC107, CD54HC107F/3A, 54AC10LMQB, etc.

SMD Projects

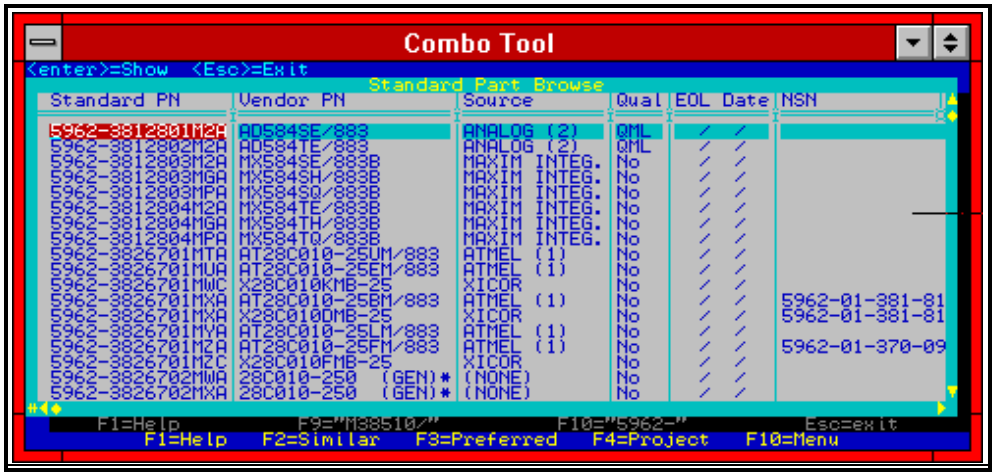


This search provides information about projects for Standard Microcircuit Drawings. The search may be based on the SMD number or the generic part number. Information is provided for projects that are active, discontinued, or not yet started. Projects for M38510 Military Specifications are not included, as they are all being inactivated.

To search by drawing number, enter just the 5-digit basic number (e.g., to search for "5962-95000", just enter "95000").

For more information about a specific SMD project, contact the responsible engineer or technician.

Features available from the standard browse window



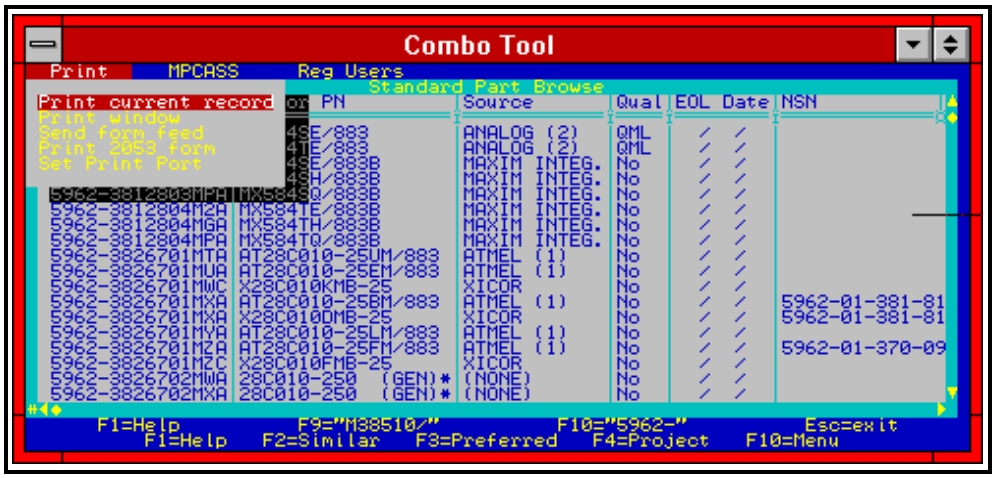
<Enter>= Show detailed info for the highlighted standard part.
<Esc> = Exit to previous screen.
F1 = Show this help screen.
F2 = Show similar parts (other packages for same dev type, mil parts). This works in two ways. If one specific part number is showing, the list will be expanded to show all packages for the same device type, as well as equivalent standard parts. If numerous part numbers are showing, the list will be reduced to the highlighted part number and its similar parts.

F3 = Show preferred part(s) in the same fashion as above.

F4 = Show project information for the highlighted standard part (for SMDs only). This includes projects that are active, discontinued, or not yet started. A point of contact is provided for more information.

F10 = Activates a menu with options for printing, constructing an MPCASS file, and constructing a Registered User file:

Print Options



Print Current Record:

Print the same information as the detail screen for this part.

Print Window:

Print brief information for all parts matching the search criterion.

Send form feed:

Eject a page from the printer.

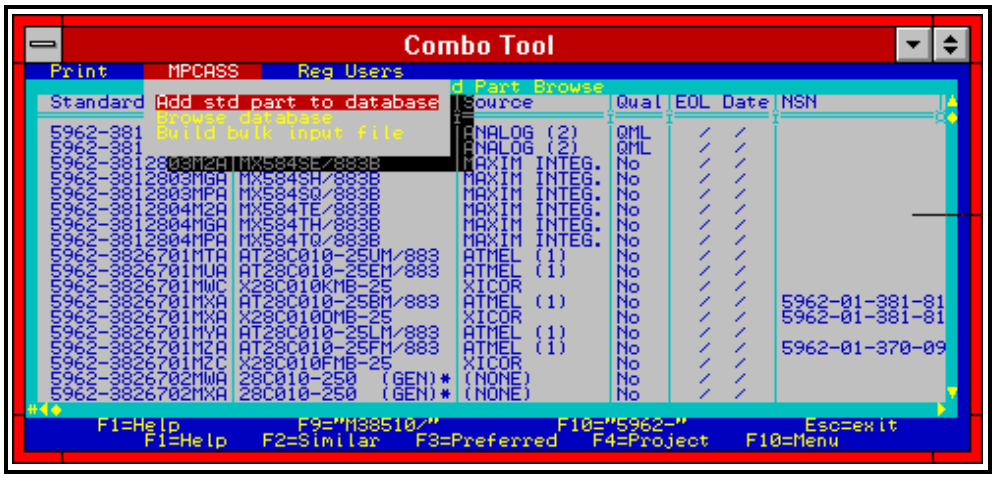
Print 2053 form:

Print a pseudo-2053 form, suitable for submitting standard parts to DSCC for review.

Set Print Port:

Determine whether printed output goes to parallel port 1, 2, or 3, or to a text file.

MPCASS Options



Add Standard Part to Database:

Append a new record to an MPCASS database for the highlighted record. The program will prompt for a log number and database file name, both of which default to the values entered under "Settings."

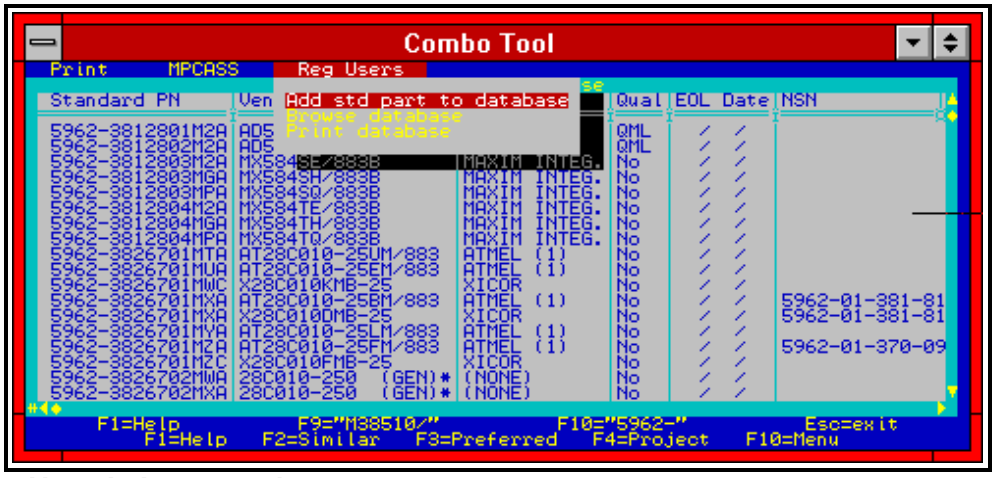
Browse Database:

Browse the database formed by adding records from the standard browse window. Records can be added, deleted, or edited from this window.

Build Bulk Input File:

Use records from MPCASS database to build an ASCII text file for submission to DSCC. The program creates the file with the proper structure for bulk input to the MPCASS system.

Registered User Options



Add Standard Part to Database:

Append a new record to a Registered User database for the highlighted record. The program will prompt for a system name and database file name, both of which default to the values entered under "Settings."

Browse Database:

Browse the database formed by adding records from the standard browse window. Records can be added, deleted, or edited from this window.

Print Database:

Use records from Registered User database to print a list for submission to DSCC, for inclusion on the Registered Users List for SMDs.

Parts control for microcircuits:

Contractors submitting parts to DSCC for addition to a PPSL can use this program to build an ASCII text file for electronic bulk input into the MPCASS system (50 log numbers or more).

Any standard part number displayed in the Standard Browse Window can be added to an MPCASS database by activating the menu, selecting "Add to MPCASS database", and typing in a log number. The contract code and database name default to those entered for "Settings".

Once all the parts to be submitted have been added to the database, the MPCASS bulk input text file can be built from the database. Information needed to build the file header will default to the values entered for "Settings".

The text file may be edited, but the contractor is responsible for ensuring that the file meets the format requirements of the MPCASS system. For more information about MPCASS bulk input submittals, contact DSCC-VSC, Carl Muncy at 614-692-0635.

Configuration Management of SMDs:

Users of SMD parts should submit to DSCC a list of SMDs used by their applications, for addition to the Registered Users List. This list is used to notify users of changes to individual drawings.

The list of SMDs used may be compiled using this program (in the same manner as the MPCASS database described above), and submitted to:

Defense Supply Center Columbus
ATTN: DSCC-VAC, David Queenan
3990 East Broad Street
Columbus, OH 43216-5000

or fax to: 614-692-6939
or e-mail: David_Queenan@dscc.dla.mil

Please include a cover letter with company name and mailing address, point of contact and phone number, and if possible, fax number and e-mail address.

Distribution of SMDs:

Copies of individual SMDs are available by contacting the responsible engineer or technician in DSCC-VAC or DSCC-VAS (consult the phone listing available through this software).

Electronic copies of most SMDs will soon be available via World Wide Web at http://www.dscc.dla.mil. Use of the web site is highly encouraged, as it reduces printing and mailing costs.

For advance copies of SMDs still in process, contact the engineer or technician working on the project.

Defense Supply Center Columbus
DSCC-VQ
3990 East Broad Street
Columbus, OH 43216-5000
(614) 692-0582